Tropical Storm Alberto

1994

SW Georgia - Alabama - Florida Floods

Remembered

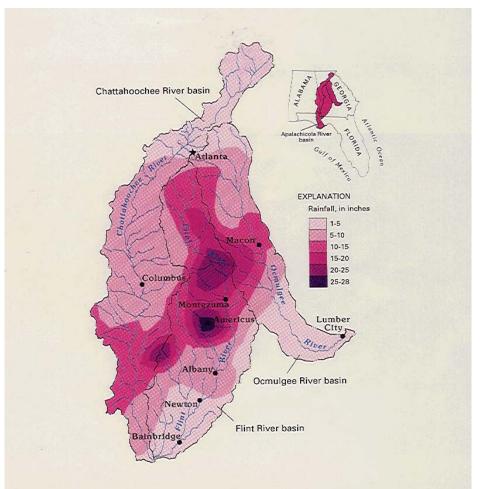
NOAA WFO Tallahassee

By Joel Lanier, Senior Service Hydrologist

July 7, 2004

Then and now...Dramatic River Floods <u>back then</u> ...Advanced Hydrologic Prediction Services now.

he July 1994 Tropical Storm Alberto Floods brought devastation to communities in Southeast Alabama on the Pea and Choctawhatchee Rivers: in Southwest Georgia on the Flint River and the Apalachicola and Choctawhatchee Rivers in the Florida Panhandle. Major towns such as Albany and Newton Georgia were inundated by water 20 to 25 feet above flood levels. Both Lake Blackshear Dam and Albany Dam were overwhelmed. Many small earthen dams were breached and several lives lost as a result. There was also considerable damage in Newton and Geneva Alabama and Caryville Florida. Communities and Agencies at all levels pulled together to cope with the floods.



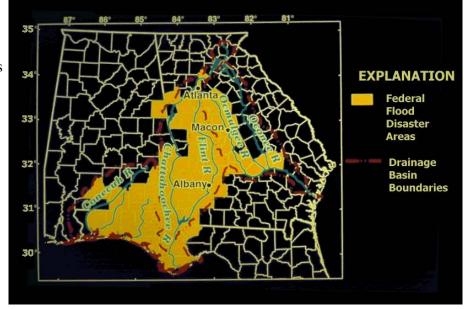
Cumulative precipitation during Tropical Storm Alberto, July 3–7, 1994 (data from U.S. Bureau of Commerce, National Weather Service).

The net result was 33 lives lost and over \$750 million dollars in damage due to inland flooding caused by a dissipating tropical storm.

The flood event began as Alberto roamed north across the Florida Panhandle near Destin into Southeast Alabama and stalled just southwest of

Atlanta Georgia. The decidedly wet and unwelcome house guest dropped 12 to over 24 inches of rain across portions of Western Florida, Southeast Alabama and Southwest Georgia. Americus Georgia received the highest storm total of 27.6 inches. 21.1 inches fell in just 24 hours.

Though soil conditions before the storm were normal, the intense rainfall created a rapid flow of flooding water into creeks streams and rivers. Most rain fell in the headwaters of the Ocmulgee, Flint, Pea and Choctawhatchee Rivers and across the lower Chattahoochee River. Ironically, the flooding occurred downstream on the Flint, Apalachicola and Choctawhatchee Rivers in areas that had received much less rainfall, but were on the receiving end of the flood waters. This flooding created 30 new record



crests including 20 on the Flint river, 4 in Southeast Alabama and one on the Apalachicola River at Blountstown.

The <u>Natural Disaster Survey Report</u> for Tropical Storm Alberto contains complete details on the storm.

Modernization - AHPS

Since the 1994 Alberto Flood, the National Weather Service has upgraded river and flood forecasting services with new technology at the River Forecast Centers and Weather Forecast Offices nationwide. The Weather Forecast Office in Tallahassee has implemented the Advanced Hydrologic Prediction Services (AHPS) and assumed Hydrologic monitoring, forecast and warning duties for the Southeast Alabama, Southwest Georgia and Northern Florida.

WFO Tallahassee in conjunction with the United States Geologic Survey, various state agencies such as the Choctawhatchee Pea Yellow River Water Authority, Northwest Florida Water Management District and various County and City agencies continue to expand the observation network across the area. The USGS has upgraded many river reporting gages to satellite communications and hourly reporting

Local Weather Forecast offices are now testing Site Specific Forecasting on smaller creeks and streams to augment regular river forecasts issued by the River Forecast Centers.

Other model improvements such as Flood Wave, Distributed modeling, flood innundation map forecasts, and Dam Break models are also being tested and implemented.

Current information on rivers and streams in our area as well as AHPS can be viewed at:

http://www.srh.noaa.gov/cgi-bin/ahps.cgi?tae

Turn Around - Don't Drown **TADD**

The rainfall from Alberto was extremely heavy. Runoff generated major flash floods on small creeks and streams across numerous counties stretching from central Georgia westward and southward into southeastern Alabama. 218 earthen dams failed in Georgia. These dams often fail when an extreme rainfall event causes the outflow of the dam to exceed the spillway capacity of the dam.

During Alberto, flash floods generated by dam failures and other flash floods swept vehicles off roadways. Two-thirds of the flood deaths occurred in vehicles as motorists attempted to cross flooded roads and bridges while flood waters were rising rapidly.

Roads covered by water during floods are dangerous. What you can't see in flooded waters can drown, injure or even electrocute. Water weighs 62.4 lbs per cubic foot. Fast moving water can quickly channel through roads. Driving over a flooded road invites a bad encounter with such unseen channels, especially in fast moving water. Don't depend on a large vehicle to make it. Large tires are also large pontoons and can easily float a large truck.

In an effort to reduce the number of needless floodrelated deaths, the NOAA Weather Service, the Federal Alliance for Safe Homes (FLASH) and other partners launched the

Turn Around, Don't DrownTM (TADD) flood safety campaign.

This campaign is being used to educate the public about the dangers of driving or walking into flooded areas.

More information on TADD can be found at the Turn Around, Don't Drown link above.



Broken dam and empty farm pond, Sumter County, Ga. - 7/9/94 by T.



Local Detail

The Alberto Flood event hit the towns of Albany and Newton Georgia particularly hard. In Albany nearly one-third of its 76,000 residents were evacuated. Downstream, at Newton, nearly the entire town was flooded to depths of 15 to 20 feet.





Bruce Maples, who was the City Engineer for the City of Albany between 1994 and 1997 has vivid memories of the event. The photos of Albany and Newton Georgia on this page give some indication of the extent of the flooding. Please read Bruce Maples recollections by clicking on the following link:

Recollections from Bruce Maples, P.E. http://www.srh.noaa.gov/tlh/RBM.pdf



Baker County (Ga.) Courthouse, Newton, Ga. - 7/94 by M.S. Reynolds

The photos of Albany and Newton Georgia taken during the flood were obtained courtesy of the Interagency Spatial Information Team (ISIT) of Georgia Tech.

Additional information about Tropical Storm Alberto can be found at the following web links:

US Department of Commerce News Release
WFO Peachtree City News Release
Georgia Tech - Alberto Flood Pictures
Georgia Tech - Alberto Flood Maps

Alberto Flood Innundation Movie - Albany, GA
This is a large mpg file. Recommend
downloading and playing on a local personal
computer for best results.

Credits:

Natural Disaster Survey Report - TS Alberto Georgia Tech ISIT USGS NOAA and NWS